AVICULTURAL MAGAZINE

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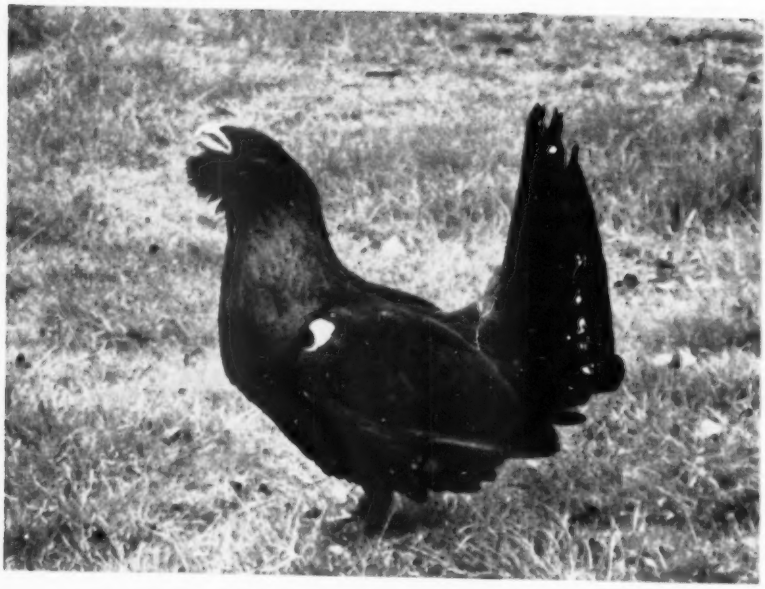
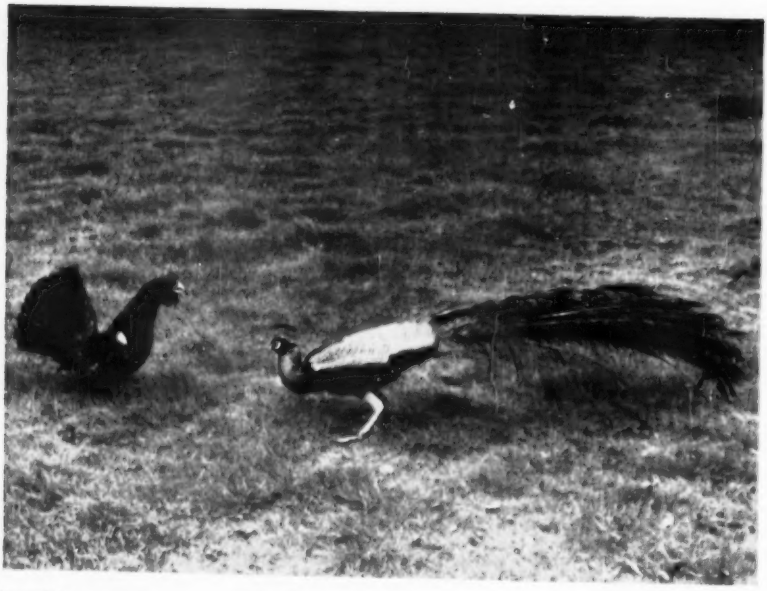


Capercaillie Clicking and Fanning.



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Capercaillie Prepares to Attack a Peacock.

AVICULTURAL MAGAZINE

THE JOURNAL OF THE AVICULTURAL SOCIETY
AND THE AVICULTURAL SOCIETY OF AMERICA

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THE CAPERCAILLIE IN CAPTIVITY

(*Tetrao urogallus*)

By S. H. BENSON, Director-Secretary, Zoological Society of Glasgow and West of Scotland (Glasgow, Scotland)

When a poultry farmer in the County of Angus, Scotland, phoned me to say that he had trapped a Capercaillie cock bird (*Tetrao urogallus*), and that he wished to present it to our Gardens, I accepted his kind offer with some misgivings. It was in the last week of September, 1950, and the prospects of being able to provide an adequate supply of coniferous feeding throughout the winter were not good.

Although there are many areas of conifer woodland in Scotland, they are not convenient to the City of Glasgow, where our Gardens are situated. I was able, however, to have branches of pine and fir sent in for the first five weeks, and although the bird picked at them, one could not say that it tackled them with avidity, or showed as much preference as it did for the Indian corn (maize) and whole oats supplied by us, or the herbage and insects it got in the 1½ acre wood with thirty deciduous trees.

However, let us first of all consider the psychological attitude of this bird—very difficult to keep in captivity—in a strange and confined environment. In the wood were peafowl, guineafowl, wallaby, Egyptian Geese, Blue Snow Geese and Grey Lag. The Capercaillie moved about in an aloof attitude, at times aggressive. Its one ambition seemed to be to escape ; one could not say that it was resigned to confinement.

Its attitude to visitors is one of expediency, and in competition with the other birds it gets a major share of tit-bits ; I have noticed a very marked preference for potato crisps ! Biscuit and bread are also eaten with relish.

In the winter, when it was thought that the Capercaillie could not live without pine needles, the bird managed finely with the food provided by us, even though it was deprived of herbage through frost and snow.

Following a letter I wrote to *The Field* on the subject of our unique Capercaillie, some rather interesting information followed in the columns of that publication. One writer said that it is evident that young Capercaillie, reared in Scotland, in the wild state, can get no pine needles until they are able to fly up to the tree tops. He knew of young Capercaillie broods going into fields of growing oats long before oats were ripe, and remaining there, feeding on oats and weed seeds, until the corn was cut. But this writer asserted that pine shoots form their winter reserve of food. Nobody doubts this under natural conditions, but our experience proves that the bird can live without coniferous food in the winter.

Dr. Ian D. Pennie, who has investigated the history and distribution of the Capercaillie in Scotland, mentions its reduction in its colonisation areas and its extinction in others, due to widespread felling of conifers caused by two world wars. There is evidence of changes in the Capercaillie habits. Younger plantations are now frequented and birds regularly visit stubbles to feed.

It now seems that we are witnessing a unique change in the habits of the Capercaillie ; a change which may have advanced somewhat farther than we realize. We may well assume that our success in keeping one so long is in some measure due to its being a product of the " new race ".

Let us now consider the exhibition of a Capercaillie in a Zoological Garden where the great majority of visitors expect to see striking and exciting specimens. To many, the lonely, ungainly and somewhat unusual bird is interesting. Some think it is a bird of prey. However, the fact that it begs so successfully in face of competition assures the Capercaillie of an admiring audience.

In May, 1952, we were able to observe the display of the Capercaillie. It is a most impressive performance, and I think it is something that few can claim to have seen in the wild state. The neck is stretched and the tail is fanned vertically in a way that suggests the Turkey's nuptial performance ; wings are drooped and the bird struts about in a most hostile manner. Its aggressive attitude is no idle threat, for I have seen it attack our Peacocks and even advance on the keeper when he went into the wood.

The exhibition is not confined to action, and there is an unpleasant vocal accompaniment more suited to a mammal. The prelude to attack is a very clear click, and this call is repeated at frequent intervals. We have been trying to get a hen to keep our bird company but so far have been unsuccessful.

So far as I am aware our keeping of a Capercaillie so long (in a zoological garden) is a record, but it is not by any means a record for keeping them in captivity anywhere. I am most reliably informed that they have not only been kept for a number of years in Sweden,

but several young ones have been bred and reared. At the last International Conference of Zoological Societies, held last September in Rome, I was shown photographs of these birds in Sweden.

* * *

TWO OLD BIRDS

By THE DUKE OF BEDFORD (Woburn, Beds, England)

It is not often that a Parrot-like bird dies in one's collection of genuine old age. If the management is good it is, indeed, the owner who may first succumb to that universal malady !

This summer I have, however, lost two cock Roseate Cockatoos from this cause, but there was rather a remarkable difference in the manner of their going. One, tame and a talker, I acquired a few years ago from the Zoo, where he had doubtless been a number of years, probably after a similar, or longer, period in other hands. He was at first wing-stiff from long caging, but soon recovered the power of flight and he bred a few weeks later, and continued to breed until this season, when he had no mate.

He remained in good spirits and perfect plumage until a few weeks ago, when he began to spend an abnormal amount of time in the shelter and did not seem as active as usual. His appetite remained good, and he brightened up a bit in the high temperature of the hospital, readily greeting his friends with conversation, but he never got really right, and died before he seemed well enough to turn out again.

The other cock—a non-albino white—I obtained, with an albino hen, about 25 years ago. For some seasons they bred, producing always grey young, but they stopped doing so about sixteen years ago. The cock began very slowly to show signs of age. When I brought my birds to Woburn I decided to fly him at liberty in the hope of rejuvenating him. Complete liberty sometimes has a marvellously rejuvenating effect on birds that have aged prematurely owing to close confinement in a cage, but it did not make much difference to the old Roseate, doubtless because he had long been living in an aviary which allowed a decent amount of exercise. He behaved sensibly, and stayed round the aviaries, but never flew about very much. He also became slowly more feeble and after my aviary attendant had found him one day on the ground, and unable to make his way home, I decided that he would have to end his days in an aviary. The way he hung on to life, not only for months, but even for years, was, however, extraordinary. His plumage became very abnormal, his once-white wings growing more and more pink. He also never had a proper moult, but always had some feathers in quill.

Most of his time he spent sleeping, but the weather did not seem to trouble him, and he would often sit, by choice, in cold, drenching rain, when a cosy shelter was available. His companion at this time was a hen Malabar Parrakeet for whom I have never been able to secure a mate. I thought they would agree together as she would be too small to hurt him, and he would be too decrepit to hurt her. They not only agreed, but formed an attachment for one another—the strangest, most amusing, and most pathetic I have ever known among birds. "*Amor omnia vincit*" was certainly true in their case. There were differences in size, the Cockatoo being about four times as big as the Parrakeet. Their language was wholly different. Their courtship technique was wholly different. A courting Roseate preens his feathers as an invitation to his lady-love to return the compliment, and also to allow him to preen hers ; but he does not feed her. A courting Malabar does not preen his lady's feathers, but he does feed her. That the Malabar should have made advances to the Roseate in spite of these difficulties was not so very strange, as lonely spinsters, with or without feathers, *do* sometimes try and make the best of *very* unpromising material ! What was extraordinary was that the poor old Cockatoo, with one foot in the grave, and not within a hundred miles of any capacity to be in breeding condition, not only understood the Malabar's affectionate intentions, but appreciated and was flattered by them, trying bravely "to be young for her sake" ! When she made advances to him he would perk up and make nibbling movements with his beak, as Roseates do when feeling friendly. He would also start preening and she, partly understanding what was required of her even though it was not at all what the instinct of her species taught her, would pull his feathers in a clumsy but gentle fashion, an attention which pleased him very much.

The sad time at last came, however, when it seemed kinder to have the old man put to sleep as, if he fell off the perch, as he sometimes did, he was only able to regain it with great difficulty.

* * *

NOTES ON THE GREEN GLOSSY STARLING

(*Lamprocolius chalybeus*)

By BETTY ADAMSON (Slough, Bucks, England)

Glossy Starlings have appealed to me ever since I first saw them at the Zoo as a child, but I did not keep any myself until May, 1951, when I was given a Purple Starling, *Lamprocolius purpureus*, and subsequently purchased an orange-eyed Green Glossy Starling, of whose specific name I was not sure, as a companion for it. There was no sign of pairing between them during the summer, as I half hoped there might be, and later behaviour showed them both to be males.

In November, I acquired another pair of green Starlings, slightly larger and with yellow eyes. Derek Goodwin has examined and compared notes on the plumage of the three green Starlings with skins at the Natural History Museum and has come to the conclusion that they are all the same species, *Lamprocolius chalybeus*, and that the orange eye colour is an individual or local difference, although the books give " yellow " as the eye colour for all races of *L. chalybeus*.

The first owner of the yellow-eyed birds did not know if they were a true pair, and certainly there were no external differences except that one had a permanently ruffled patch of feathers on the breast and was, perhaps, a fraction smaller. They were in very good condition, so I introduced them straight away into an aviary 15 feet by 22 feet, with a shelter 8 feet square, whose other inhabitants were the Starlings mentioned previously, a pair of Blackbirds, several British finches, a pair of Barbary Doves, and a pair of Budgerigars.

They all agreed quite well together during the winter, although the green pair speedily established superiority over the other insectivorous birds, they did not molest them unduly. By March, however, they were becoming decidedly aggressive, and harried the Purple Starling in a disturbing manner, but did not take so much notice of the orange-eyed Starling or the Blackbirds. After one particularly bad scuffle I decided to put them in an adjoining aviary occupied solely by a hen Jackdaw. This aviary was only 6 feet wide by 14 feet long, plus a shelter 5 feet by 8 feet.

Inside the shelter I nailed up a budgerigar nest-box, with the door at the front left open, and both birds showed interest in it but made no attempt to carry nesting material. I had seen the cock offering mealworms to the hen, who accepted and ate them, although occasionally she would return the mealworm to the cock and it would pass between them several times before she ate it. They had also tugged at string securing the perches, as if with nest-building intentions.

On 1st May I nailed up a parrakeet style nest-box, 8 inches square and 12 inches deep. By the next evening a heap of twigs and dried grass had been added. On 3rd May I provided two old sparrow nests, dried leaves and more twigs and saw the female carrying feathers and string to the nest, but she made no attempt to enter while I was present. I did not see the cock carrying any material.

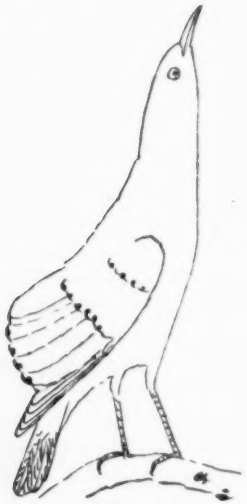
By this time the Jackdaw was very wary of the Starlings and they would not allow her into the shelter to feed. On 5th May I came home in the evening just in time to rescue her from what, I think, would have been certain death, as she was lying on her back on the ground shrieking with fear, with both Starlings pecking at her fiercely, and so engrossed were they in their murderous task that I had to go right inside the aviary to chase them off.

Left to themselves the Starlings spent a lot of time displaying to

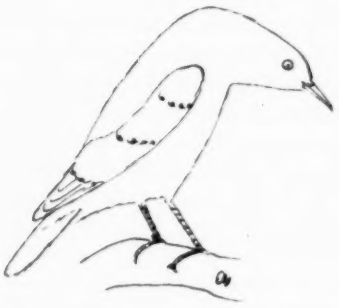
each other and the cock would go into aggressive display against the Starlings in the other aviary whenever they approached the dividing netting. There are two common postures which seem to merit full description since they do not appear to have been previously described.

(1) *The threat-display.*—When threatening a rival the male bird holds himself erect, with head stretched upwards and the wings held so that the secondary feathers, with their dark velvety spots, are somewhat spread and fully exhibited in a lateral plane. In this posture the wings (without being opened) are constantly moved with a quick, upward-fickling movement and the irides rapidly contract and dilate.

(2) *The greeting-display.*—When one of the paired Starlings is approached by its mate it often greets it by lowering its head and uttering a note rather similar to, and undoubtedly derived from, the begging-note of the juvenile. This would appear to be in the nature of a friendly greeting and, like so many displays signifying friendliness or submissiveness, it is very obviously the " opposite " of the hostile threat-display.



Lamprocolius chalybeus ♂ in " threat-display " posture.



Lamprocolius chalybeus in " greeting-display " posture.

On 12th May, having seen no evidence of nest building for three days, I provided fresh moss and dried grass, but this was not used, although a few blades of fresh green grass were added. The next day I threw down some small bits of cotton wool which both cock and hen collected and took into the nest. Early in the morning of the following day (14th May) I put in a handful of white and brown duck

and pigeon feathers which were pounced upon by both birds with much chattering and obvious excitement. By evening the nest was well lined with feathers, and the hen roosted in the nest box for the first time.

On 15th May the hen laid a soft-shelled egg at midday, so I immediately supplied plenty of crushed cuttle-bone and egg-shell. She roosted in the nest-box again that night, but on the following three nights slept on a perch beside the cock. The next three nights she spent in the nest-box and on 22nd May I found an egg, a delicate shade of turquoise-blue mottled with irregular brown splotches. Three more eggs were laid on successive days, all before 1.30 p.m., and one definitely before 10 a.m., but the hen did not commence to sit tightly until the fourth egg was laid.

The cock took no part in incubating the eggs. The hen would come off the nest whenever I appeared—regularly at 8.30 a.m., 1 p.m., and several times after 6 p.m.—in order to claim her share of mealworms. Indeed, if no mealworms were forthcoming she seemed not at all anxious to return. By now both birds were entirely insectivorous, ignoring their usual food which I continued to offer fresh daily, and eating very little fruit. If the hen spent too long off the nest—and towards the end of the incubation period I had time to notice that she frequently spent spells of five to ten minutes away—the cock became very worried and would stretch out his head and neck and run towards her, chattering at the same time, as if trying to persuade her to return to the nest.

On 5th June, exactly fourteen days after the first egg had been laid, one egg hatched, and the chick could be heard squeaking faintly, by 8 a.m. The second hatched between 1 p.m. and 6.30 p.m. the same day ; the third before 7 a.m. on 6th June, and the fourth between that time and 7 a.m. 7th June. I looked at the nest once every day in the early morning, when the hen's attention was occupied by mealworms ; the young gaped strongly as soon as the lid of the nest box was raised, but I resisted the temptation to handle them. Six days after hatching all four appeared very healthy and there was nothing to choose between them in size ; quill ridges were visible under the wing flesh. The female was still feeding them on maggots, and had now commenced to feed large mealworms, ignoring the smaller mealworms and *Tribolium destructor* larvae with which she had been supplied at first. By this time I had put down for this one pair of birds and their four young, about 6,000 *Tribolium destructor* larvae, 2 lb. of mealworms (about 7,000), and 3,500 blow-fly larvae. This seems a staggering amount, but I have under- rather than over-estimated the numbers. Some of the insects were wasted, as I found the hen much keener on picking up insects off the ground than sorting them out of a bowl and so, although the bowls of mealworms

and maggots were always present, five or six times a day I threw down a handful of mixed larvae, quite a few of which no doubt escaped.

The hen was a very enthusiastic feeder, often gathering a dozen maggots or mealworms in her bill at once, but the cock did not feel the call of parental duty very strongly, and would visit the young only occasionally, and then only with one mealworm. He would, however, visit the hen when she was sitting on the eggs or brooding the young, and give her much vocal encouragement.

The seventeenth night after the young had hatched was the last night the hen roosted in the nest box ; from then onward she slept on a perch beside the cock. The young looked ready to leave the nest, with their flight feathers well grown and tail feathers about an inch long. I now began to feed a lot of mealworm pupae as well as large larvae and both birds showed a strong preference for feeding their offspring on the pupae, and maggots were taken very seldom. They began to use a harsh, rasping call that I had never heard before, particularly in the early morning and at dusk. By 27th June, twenty-two days after hatching, I was becoming worried as the young were showing no interest in the outside world and their parents were cutting down on food supplies, presumably in an attempt to entice the young birds out. Also the weather had become intolerably hot and the temperature inside the box was well over 100° F. For the first time I handled the young and found three quite big and strong but one very thin and weak. At midday I hand-fed them on bread and milk. At 6 p.m. one young bird was out of the nest and was able to fly a little. He roosted that night on a low perch. The next day was even hotter and I found the weakest Starling dead. I removed the other two from the box and placed them on the shelter floor where they ran around quite actively but were unable to fly ; by night, however, they had managed to flutter on to a low perch.

The hen appeared to do all the feeding but often received no response from the young birds. She would lightly tap the beak, and if the bird did not gape immediately, tap its legs gently. If there was still no response, she would go to another bird and repeat the performance, but if, as seemed to happen very often, none of the young would accept the insects in her bill, she would follow them round in a very agitated manner.

By the evening of the next day one bird was very weak, and kept falling on to its side, so I brought it into the house and gave it a dose of brandy and water—a " cure all " for bird complaints, in my opinion. The weather was still extremely hot and the next day, three days after leaving the nest, the lustiest youngster—which had left the nest of its own accord and had begun to fly quite strongly—was found in the evening huddled in a corner on the ground, although at midday it had appeared perfectly well. That too was brought into the house, given

brandy, and caged with the other which now looked stronger, though we had to resort to forcible hand-feeding. The remaining bird looked all right, and roosted beside its father on a high perch.

But alas, next morning the bird we had brought into the house the previous evening was dead and the one left in the aviary was lying on the floor. It failed to respond to any treatment and died within half an hour. The first one to fall sick seemed much brighter but several times that day had bouts of lying on its side and " breathing its last ". Each time, however, we managed to revive it with brandy, and it is now a strong bird, having undergone its first moult during October.

I sent one of the corpses for a *post mortem* examination, but owing to the heat the body was too decomposed for the cause of death to be ascertained. The pathologist did, however, suggest that the heat may have had something to do with it, and yet it seems extraordinary that a bird which comes from a tropical climate should succumb to an English heat-wave.

The parent birds continued to visit the nest-box and to add bits of nesting material ; feathers, dried grass, etc., and also fresh green grass which I saw the cock pull up with his beak. Several times the cock attempted to mate with the hen when they were picking up mealworms that I had thrown on the ground, and this was the only pairing I witnessed. There was a minor domestic drama before the arrival of the next egg. The orange-eyed Starling in the adjoining aviary had for some time been " making eyes " at the hen whenever she left her family, and when once they were gone he redoubled his efforts to attract her away from her husband. He would run backwards and forwards on the ground beside the wire separating them, then fly to his nest-box, at the same time chattering and calling to her. She seemed quite ready to follow if only the netting had not been in the way, and would run along the ground on her side while her husband pursued her and did his best to get between her and the other cock. But the purple-headed Starling at no time showed interest in " the lady next door ".

On 12th July a soft-shelled egg was laid at noon and the hen roosted in the nest-box at night. On 15th July I did not look into the nest box until 6 o'clock in the evening and I then found one egg which was misshapen, being very elongate and pointed. This egg was incubated for sixteen days, but failed to hatch.

On 10th August the hen laid again, just one egg, and this hatched in thirteen days. The young bird thrived and left the nest twenty-three days after hatching. It was out of the nest by 8 a.m. and scuttling round the floor when I appeared, but it did not fly for three days, sleeping on the floor in a corner of the shelter. On the fourth night it roosted on a low perch and from then on made great progress.

The weather was cold with several sharp frosts at night, but the bird seemed unperturbed. The survivor of the previous nest, however, whom I had transferred to a cage in the other aviary shelter, was so miserable, shivering with puffed-out plumage, that I decided to keep him in a cage in the house for the winter.

Ten days after her offspring had left the nest it became obvious that the hen was going to lay again. In feeding the cock had again played only a small part and whereas the hen would gather a bill full of mealworms and deliberately seek out the young bird and feed it, the cock only fed the young bird if it was near him and actually begging for food. Even then he would pick up only one mealworm at a time. As the hen lost interest in him, so the young Starling became weaker ; he sat near the mealworm bowl and asked for food whenever one of his parents flew down, but they fed him in a perfunctory and unwilling fashion, and although he had begun to examine food of his own accord and would, I think, have commenced to pick up satisfactorily in another few days, his increasing weakness made it difficult for him to balance when trying to pick up a mealworm. On 27th September an egg was in the nest by 12.30 p.m., and the young bird was so much weaker that I forcibly fed it twice on bread and milk and mealworms. The following day a second egg was laid by 11 a.m., and I removed the young Starling and caged him with the other young one who had now commenced to moult and had become very quiet, but was eating well.

Two days before this next lot of eggs were due to hatch the aviary roof was repaired and the hen was off the nest for over three hours, being replaced by a hot-water bottle. I hadn't much hope of the eggs hatching, as the weather was extremely cold and the hen seemed to spend even longer intervals away from the nest than she had done previously, so I was greatly surprised to find a chick in the nest at 8.30 a.m. on 11th October. The second chick was just out of the shell when I looked in the nest at 10.30 a.m. the following day. This egg shell was not removed until noon, when I saw the cock fly out carrying half the shell which he proffered to the hen as though offering a mealworm. She did not take it from him, however, and he then flew down to the ground and ate some of it. This was the only time I saw the shell removed and eaten, but as I never found any traces of the other egg shells, I presume they must all have been treated in the same way.

The day was overcast and cold, and my joy at the successful hatching was somewhat tempered by the fact that the hen did not appear to share my pleasure, and spent very little time with her offspring. The following evening one had disappeared and the other felt cold, but was still alive the next morning when I brought it into the house to try to hand-rear it. Unfortunately I was not successful.

At the time of writing (December) the two young birds that did survive are spending the winter in a large cage in our kitchen, and judging by the amount of their " singing " are both cocks. The last-hatched has only just commenced to warble properly, but for some weeks has been emitting the most awful, harsh, nerve-racking squawks in an effort to find his voice. Like budgerigars they appear to be stimulated by certain noises such as a kettle boiling and food frying. It is at times quite difficult to make oneself heard.

A brief note on the general feeding of the Starlings may be of interest. Their staple diet consists of Sluis' Universal food, Rudd's Anteggo, bread and milk, and fruit, pear being the favourite. A handful of mealworms or maggots is thrown down twice a day. The birds also relish scrambled egg, cake crumbs and other odds and ends from the household table. They were outside all last winter with only slight heat supplied by an electric tubular heater on the very coldest nights. This year they have had no heat at all and appear quite fit, although we have had some extremely cold weather.

The insects offered to the pair when rearing young were all species that infest various foodstuffs and of which I am able to obtain fairly large quantities through my work. Larvae of the following species were used :

Carpophilus dimidiatus—Corn-sap beetle.
Tribolium destructor—Dark flour beetle.
Alphitobius laevigatus—Lesser mealworm.
Tenebrio molitor—Mealworm.
Ephestia kuehniella—Mill moth.
Three species of blow-fly.

The first mentioned, *C. dimidiatus*, is easily cultured on a mixture of 18 parts rolled oats to 1 part dried yeast powder, and if kept at a temperature of 25° C. (77° F.) will produce large numbers of soft-bodied white larvae, about 5 mm. long, in two to three weeks. I imagine they would be extremely suitable for small, delicate, insectivorous birds.

Cockroaches were offered on several occasions, but never accepted.

My thanks are due to Derek Goodwin, not only for kindly supplying the line drawings, but also for much helpful advice on the preparation of this article and management of the birds generally.

* * *

THE BIRDS OF LAKE MÝVATN, ICELAND

By JOHN YEALLAND (London, England)

Lake Mývatn is situated in north-eastern Iceland, some 55 miles by road from the town of Akureyri and at about 1,000 feet above sea-level. The lake is indeed a beautiful place in a country of much scenic grandeur and there can be few comparable places in the world where waterfowl of thirteen species breed in such numbers or in such a concentration.

The main reasons for this would seem to be the abundance of food, the comparative scarcity of natural enemies, and the suitability of the nesting terrain on the shores, on the islands and about the surrounding streams. The ducks are never shot but are carefully preserved for the egg harvest.

All the land around the lake and every island, however small, belongs to one farm or another, and the ducks' nests are robbed of all but four eggs, though great care is taken that no bird deserts because of the belief that it will re-nest on someone else's land. The eggs are a considerable source of income to the farmers, who must make a return of the numbers taken to the Inland Revenue authorities for the purpose of income tax.

Thus it would be impossible to ascertain exactly how many eggs are taken annually because no doubt the official returns err on the side of modesty, but it must amount to some thousands.

It might be thought that this egg-collecting must be disastrous for the birds, but evidently that is not so, for the mortality among the ducklings is very high, mainly, it would appear, for the reason that many of them lose sight of their mothers, so that unless they are able to join on to another family—and most ducklings are, of course, often hostile to newcomers—they soon perish from the cold. If, therefore, the mothers are unable to care for four it is unlikely that they would be appreciably more successful with a normal brood.

Also, of course, the taking of eggs has been going on for many years, yet it would seem that the area could scarcely support a much greater population than the present one.

The chief natural enemies are the Raven (*Corvus c. corax*) and the Greater Black-backed Gull (*Larus marinus*), neither of them common. I once saw a pair of these gulls attacking a duck far out on the lake. The duck was trying to escape by diving, but its course under the very clear water was easily followed by the gulls which pounced upon it whenever it came to the surface. At length they caught it and then set about trying to drown it—and dreadful it was to see the unhappy bird striving to get its head up for air.

The Ravens sometimes take sitting birds, but the remains of ducks and their eggs are not a common sight.

I think it is correct to say that the birds of prey (the Iceland Falcon, Snowy Owl, etc.) which seem to be rare round about the lake, for I did not see one, and the Arctic Fox, which is shot by the farmers, feed more on the Ptarmigan than on the ducks. The name Mývatn means the lake of gnats or midges—and very appropriate the name is, for these and small flies are present in the summer in many millions. Mercifully they do not bite, but on a sunny day they swarm in such clouds that it is sometimes difficult to see where to step. While I was there in June a 24-hour blizzard killed off many of these insects so that life for the ensuing week became more agreeable.

These insects with their larvae and pupae must form a large part of the diet of the birds ; there is also a species of caddis-fly, the larvae of which are attached to the submerged lava boulders, and some water-snails.

Reykjahlid on the northern side of the lake is perhaps the best place for seeing the nesting birds. A mile or so off shore is the pretty island of Slutness, a favourite nesting place, as is a tip of land on the further side wherever the ground is carpeted by the dwarf birch with moss growing up between its foot high twiggy branches.

The lake in this area is no more than five or six feet deep, and here it seemed that the Long-tailed Duck (*Clangula hyemalis*) was more common than elsewhere, and at another place a few miles off Barrow's Golden-eye (*Bucephala islandica*) was more plentiful ; another was more favoured by the Common Scoter (*Melanitta n. nigra*) and in another there seemed to be more Tufted (*Aythya fuligula*) than anywhere else.

The most common duck of all was the Scaup (*Aythya m. marila*) and it may be that these preferences for certain localities is determined by the nesting terrain rather than by any food factor.

Red-breasted Merganser (*Mergus serrator*), Wigeon (*Anas penelope*), Pintail (*A. a. acuta*), Gadwall (*A. s. strepera*)—said to have become more common within the past 40 years—Teal (*A. c. crecca*), and Mallard (*A. p. platyrhyncha*) also nest here.

A certain amount of indiscriminate laying of eggs seems to take place, single ones being laid far from any nest, and once I found a nest with nineteen Scaup eggs in it and a Long-tailed Duck stting on four of its own and four Scoter eggs. Barrow's Golden-eye normally nests in holes or crevices in the lava rocks but on Slutness one was sitting under the bushes, the nest being rendered very conspicuous by the heap of pale grey down. I was shown a cavern with perpendicular sides in which a Barrow's once nested on a ledge, the young being unable to get out until rescued by a kindly farmer.

Contrary to the impression conveyed by a drawing of Mývatn in Millais' *British Diving Ducks*, the Harlequin Duck (*Histrionicus h.*

histrionicus) is rarely if ever present on the lake itself, but, like the Goosander (*Mergus m. merganser*), inhabits the fast running streams and rivers, particularly those with islands in them, which flow in or out of the lake. At one place on the southern side Harlequin Ducks may be seen from the road. These strikingly handsome birds are tame, allowing one to approach quite near and then not taking flight but swimming off downstream.

It is strange that they possess such quiet voices, for they must scarcely be able to hear one another amid the rushing waters of their favourite nesting places.

Within a few feet of the shore at Reykjahlid were two nests of the pretty Slavonian Grebe (*Podiceps auritus*) and on Slutness in a crevasse in the lava was a nest of the Iceland Redwing (*Turdus musicus coburni*) with newly hatched young, while in a loose stone wall a White Wagtail (*Motacilla a. alba*) had its nest. Here the Red-necked Phalarope (*Phalaropus lobatus*) was a common bird and one nest with the husband dutifully sitting was found. The Arctic Tern (*Sterna macrura*) is also common and the nest, always placed in conspicuous position, would yet be difficult to find because of the coloration of the eggs if the parent birds did not betray their presence by mobbing the intruder. The Northern Golden Plover (*Pluvialis apricaria altifrons*) is quite common, small flocks often being accompanied by Dunlins—the form intermediate between *Calidris a. alpina* and *C. a. schinzii*. The Faroe Snipe (*Capella gallingo faroeensis*) and the Whimbrel (*Numenius p. phaeopus*) are sometimes to be seen round about the lake ; also a few Black-headed Gulls (*Larus r. ridibundus*).

In rocky places the Snow Buntings (*Plectrophenax n. nivalis*) were nesting and the males performing the pretty display flight ; the Wheatear—intermediate between *Œnanthe œ. œnanthe* and *Œ. œ. leucorrhoa*—seemed quite rare, as was the Meadow Pipit (*Anthus pratensis*).

One Red-throated Diver (*Colymbus stellatus*) was seen and another heard ; a single specimen of the Kentish Plover (*Leucopolius a. alexandrinus*) was also seen, but perhaps the rarest of the summer visitors to Mývatn was a single drake American Wigeon (*Anas americana*) flying in company with two females which may or may not have been this or the Common Wigeon.

In Reykjavik the Mallard is common on the small lakes within the city and very tame ; the graceful Arctic Tern is also common. On an island in the bay there is a colony of Eiders, not seen, but presumed to be *Somateria m. mollissima*, nesting as elsewhere in artificial nests provided for the purpose of collecting the down. The journey by road from Reykjavik to Akureyri (285 miles) is of great interest. Whooper Swans (*Cygnus c. cygnus*), Grey Lag-Geese (*Anser a. anser*), a few Whimbrel and Golden Plover, and one or two of the Iceland Redshank

(*Tringa totanus robusta*) were seen. One unforgettable picture was presented by some Eiders flying over a small lake against a background of blue-grey mountain.

* * *

ON RE-MATING PSITTACINE BIRDS

By EDWARD BOOSEY (Keston, Kent, England)

For some years we had a cock Alexandrine Parrakeet mated to a hen lutino Ringneck, and they produced several broods of rather handsome hybrids which were about intermediate in size between their two parents, and had light biscuit-brown wing-patches instead of the maroon-red ones of an Alexandrine.

Last year I decided to mate their mother to a cock lutino Ringneck, and their father to a hen Alexandrine bred by Captain Veitch, and the latter mating produced a brood of three excellent young Alexandrines. The cock Alexandrine, however, recently died, and I decided to mate the hen to one of the male hybrids ; a mating which (if the inheritance is a sex-linked one) ought to produce a percentage of lutino hen hybrids which would be three-quarter Alexandrines.

After allowing the Alexandrine hen a decent interval in which to mourn her late husband, I introduced the male hybrid into her aviary, which is of our cockatoo type, without an enclosed shelter, but with the back and third of the top and sides boarded over. The meeting was, on the hen's part, frigid in the extreme, and she regarded the unfortunate cock with a glassy stare worthy of a disapproving Duchess in a novel by Ouida. Although she did not actually pursue him about the aviary, as a Broadtail would have, she lunged at him if he ventured anywhere near her, and would not allow him under the sheltered part of the aviary at all.

I then moved them both into an aviary of quite a different type with an enclosed shelter, and at once the hen was perfectly amicable with him, even when shut in the shelter at night. After three weeks or so, thinking they had got quite used to each other, and that the hen might breed better in her old aviary, I put them back in it, and immediately the hen became as hostile to him as before, glaring at him as though he were a complete and highly undesirable stranger. Once more I transferred them to the other aviary and once more peace reigned, this time with her actually making advances to him !

One may say that the hen's behaviour was strange—and so it was—but I suppose it is only on a par with the widow who marries again, and doesn't mind living with her new husband in a new house, but couldn't bear the thought of doing the same thing in the old one—which would " have associations " for her !

This matter of association is very strong in birds ; it is clear that the hen Alexandrine associated her old aviary so strongly with her former husband, and the covered part of it with where her last year's brood was reared that, while the new cock was permitted to sit unmolested in the open part of the aviary, he must on no account be allowed under the covered part where the nest-box used to hang. Taken away from these familiar surroundings her hostile attitude towards him ceased immediately.

It is for this reason that it is so important in the case of really aggressive parrakeets such as Broadtails never to put a newly acquired hen into a cock's aviary, particularly of course if he has recently lost his wife. Even if he has not been previously mated he will be apt to resent the sudden appearance of a hen in his aviary, and will be quite capable of scalping her unless a careful watch is kept to see that they agree.

The best plan is to put the hen in an aviary by herself for several weeks—preferably in sight of the cock—and then put *him* in *her* aviary, where he will feel like a new boy at school and will be too busy exploring his unfamiliar surroundings to attack the hen.

Of the Broadtails I have kept I have found Brown's Parrakeets by far the most difficult to re-mate, and one of the most deadly aggressors if they happen to disapprove of the partner you offer them, so anyone possessing these rare and beautiful parrakeets would be wise to take every precaution when re-mating them, or even when mating them for the first time. Before the war we had at Keston a wonderful breeding pair of Brown's who reared a large number of young ones during the years we had them, and when eventually the hen died, the cock was very pathetic and quite inconsolable and indeed did not long survive his wife. Any hope of re-mating him was quite out of the question as he savagely attacked any hen that was put with him. Such constancy among parrakeets must be rare.

At the other end of the scale, Stanleys, as well as being the smallest and one of the most attractive of the Broadtails are by far the easiest to re-mate.

Grass parrakeets usually are quite easy to mate or to re-mate, though Turquoisines are, as they are at all times, the most inclined to squabble.

Redrump Parrakeets may be " faithful unto death " but that, I fear, is as far as their faithfulness goes, as I have found that members of either sex are only too willing to clasp to their bosoms, with almost indecent haste, any reasonably presentable partner that is offered to them !

I would say that most Cockatoos are quite easy to re-mate, and in my experience Lesser Sulphur-crested, and Citron-crested, and perhaps to a lesser extent Leadbeater's, usually regard a new partner without any great show of interest. Roseates, on the other hand, are more demonstrative and therefore more amusing, and, if

the meeting is a success—as it usually is—they go through the strangest antics ; raising and lowering their crests ; preening each other's crests ; and the cock, apparently desiring to admire his fiancee's profile from either side, never climbs or flies *over* her, but invariably tries to climb *under* her, often falling off in the process ; this being the signal for much raucous screaming and agitated raising of crests !

Blue-fronted Amazon Parrots, and other members of the Amazon family, are capricious : sometimes a newly introduced cock and hen will take to each other almost at once, slowly approaching each other along the perch with wings slightly lowered and thrust forward (presumably to display the differing colours at the bend of the wing as a sex-recognition sign), head feathers raised, and eyes blazing, the latter apparently being used to denote either anger or pleasure, and if, having met, they sit side by side and putting their heads in the air, utter their extraordinarily varied assortment of chortling cries—you can assume that they approve of each other. Sometimes, however, a pair will eye each other with suspicion—even for several weeks—although they may eventually become perfectly good friends. There is usually no risk to life and limb so long as they have plenty of room to keep out of each other's way, but on no account should they be confined together in at all a small space.

African Grey Parrots are a different proposition altogether, being temperamentally quite unlike any other member of the parrot family. When one has been living by itself in an aviary and another is put with it, there is seldom any sort of demonstration on either side ; dead silence reigns while they eye each other warily, though contriving to maintain an air of boredom. Suddenly one or both will give vent to one of their rudest noises or else a shrill whistle, and then again there will be silence, while they both look apprehensively round as much as to say " Who made that noise " ?

After a long interval of inactivity, the original occupant of the aviary *may* sometimes be seen sidling in a slow and sinister manner towards the newcomer, and at this point, if the latter stays put and has not the sense to remove itself out of harm's way to another perch, it should be rescued before it gets hurt. If, however, it gets out of the light, and the birds are not in a confined space, it is usually safe to leave them together. Even if they prove to be a true pair, a state of armed neutrality may be expected to persist for several days or even longer, and it is only when you see them, with locked beaks, pumping their heads rapidly up and down, that you can be sure you have got a true pair and if, after this friendly demonstration, the cock gives the hen a sly nip on the leg, causing her to squawk with pain, there is nothing to worry about, for it is all part of a Grey Parrot's strange courtship !

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BREEDING RESULTS, SEPTEMBER, 1952—JANUARY, 1953, AT DIEP RIVER, S. AFRICA

By ALLAN FRANK (Diep River, Cape Town, S. Africa)

My main aviary accommodation consists of a large planted aviary measuring 75 feet long, 50 feet wide, 10 feet high, in which are built two sheds measuring 30 feet by 9 feet by 8 feet high, and 10 feet by 9 feet by 8 feet high respectively. The aviary is well planted with flowering trees and shrubs, with a miniature rivulet winding throughout its length.

The breeding season in this part of the country takes place from September to February; some of the Australian species continue breeding up to June. In this aviary, I keep quite a large selection of both soft bills and hard bills, which include approximately 120 different species. The following species have been bred and successfully reared during the period mentioned above, i.e. September, 1952, to January, 1953: Blue-breasted Waxbills, Little Ruddies, Scathy-headed Weavers, Melba Finches, Grey Java Sparrows, Golden Sparrow, Spice Birds, Tricolour Nuns, Cuban Finches, Long-tailed Grass Finches, Silver-eared Mesia, and Silver-blue Tanagers.

A pair of Pekin Robins nested and hatched two chicks but, unfortunately, owing to some disturbance or other, the chicks died after five days. I am glad to say, however, that another pair of Pekin Robins is at present sitting on two eggs.

I obtained a pair of Silver-eared Mesias (*Mesia argentauris* Hodgson) three years ago, and during breeding season before last, that is, 1950–51, these birds went to nest no less than three times and on each occasion two eggs were laid and the young successfully hatched, but it was found that after five to six days, the chicks died. Then last breeding season, this pair of Silver-eared Mesias went to nest in September in a "Morning Glory" creeper. The chicks were hatched and the parents neglected them after three days.

In October they went to nest again in a Loquat tree where again the chicks were hatched and died after seven days. In December, 1952, they again went to nest and built a deep cup-shape nest of broad leaves lined with coir in the fork of a peach tree situated 5 feet from the ground; two eggs of a pale blue colour, blotched at the thick end with brown, were laid, and were successfully hatched. (Incubation period uncertain.) After three days, one of the chicks was found dead on the ground under the nest and had evidently been removed by the parents. The remaining chick was well catered for by the parents and was fed on mealworms which were placed in a small box attached to one of the branches of the peach tree, into which a dozen mealworms were placed five times a day. On the tenth day, the chick

left the nest, but was unable to fly very well, and the parents fed this chick on the ground. I am happy to state that the young Mesia is now fully grown and it would appear that, under better conditions, that is, without interference from other birds, it would be quite easy to breed this species in captivity.

My Silver-blue Tanagers went to nest on approximately 18th November, laying three eggs of a very faint blue texture, blotched with brown at the thick end. They built a shallow-cupped nest of twigs lined with coir in a dry bush, which was fixed to one of the aviary supports and about 5 feet from the ground. The incubation period is uncertain, but I would say approximately 17 days. Three chicks were hatched, which left the nest after fifteen days. The chicks were fed by the parents on mealworms and termites. Some difficulty was experienced in feeding these mealworms to the parents, owing to the large collection contained in the aviary; however, this was overcome by placing a small wooden tray 3 feet below the nest in which a small quantity of mealworms were placed five times a day. The young Tanagers were of a drab silver-blue colour when leaving the nest, and they are now flying about in a healthy condition.

It would appear that this species breeds quite freely and the parents are now again sitting, but unfortunately this time their nest is built in a " Morning Glory " creeper, 9 feet from the ground. Consequently it is impossible to make full observations.

* * *

PARRAKEET EYE DISEASE

By Dr. F. B. LAKE (Kingston-on-Thames, England)

Contagious conjunctivitis has long been the bane of those interested in the Australasian parrakeets. Practically confined to newly imported birds of the more desirable species, the disease has ruined many a precious consignment. Formerly it was almost invariably fatal. The bird arrived with a " sticky eye " or developed one shortly after arrival, and despite all the owner could do, progressed slowly but inexorably to a fatal termination some weeks or months later.

There have, however, been some reports of cures. John Yealland cured some of the larger parrakeets years ago with instillations of mercury perchloride, but did not succeed with Grass Parrakeets. Mr. Vane has had success with sulphonamides. David West senior cured a Many-coloured with aureomycin and yellow oxide of mercury, and Mr. T. Holmes Watkins a Splendid with sulphonilimide. I believe there have also been successes with penicillin.

I recently had the opportunity of investigating and treating six cases of this disease, and whilst these do not provide sufficient data for final

conclusions, I think the results sufficiently suggestive to be of some value. Of these six birds, four are cured, one probably cured, but still under observation, and one still under treatment at the time of writing.

The clinical appearance of affected birds is fairly constant. The disease begins as a slight thickening of the margin of the eyelids, sometimes with some beading of the smooth edge of the lid, so that the lid margin, almost invisible in health, becomes an obvious thickened rim round the open eye. There is slight, usually watery, discharge, sometimes so little as to be hardly noticeable. The bird blinks frequently and rubs its eyes on the perches. After a time the eyelids and tissues of the orbit exhibit a watery swelling which displaces the feathers from the margin of the eye, and leaves a ring of bare puffy skin round the eye. Finally the swelling becomes gross, the eye cannot fully be opened, the lids are often stuck together in the mornings by dried discharge, which tends to become more abundant and purulent, and is frequently rubbed off on to the perches or the plumage of the bird's shoulders. The unfortunate bird may linger on in this state for several weeks before death ensues.

Of the various remedies now available, sulphonamides such as sulphonilimide are effective against a number of bacteria which may infect the eye. Penicillin is effective against a considerably larger number and the new drugs aureomycin and chloromycetin are effective against nearly all the organisms causing conjunctivitis in man, with a few exceptions. Antiseptics such as $\frac{1}{2}$ per cent zinc sulphate, 1/10000 perchloride of mercury, or 5 per cent silver protienate may be employed with some effect in cases which do not respond to the new remedies.

If the germ responsible can be cultured from the infected eye, the bacteriologist will report on its sensitivity to the antibiotic drugs, and so one knows at once which to select, and what prospect of success one has. Failing such a culture, one can try one after another until one finds a remedy to which the particular infection is sensitive.

The eyes of the birds I treated were swabbed with dry sterile cotton wool, using an ordinary medical throat swab, and the swabs sent to a pathology laboratory for culture. Partly I think, because of the technical difficulty of getting a good smear of a small bird's eye, and partly because I was obliged to send my specimens by post, in only two cases was a pathogenic organism isolated. These rather surprisingly grew a penicillin-resistant strain of staphlococcus aureus. Staph. aureus is a common septic organism of world wide distribution, causing a variety of septic infections in man and animals. Most strains are highly sensitive to penicillin, a few (such as this one) are penicillin-resistant, and these usually respond to aureomycin or chloromycetin. Staphlococci are not usually affected by sulphonamides, and a case cured by sulphonilimide must have been infected with some other organism.

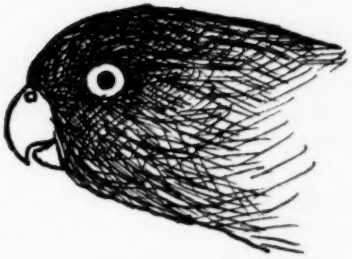

FIG. 1.—HEALTHY.

The lid margin is hardly visible. The plumage closely surrounds the eye.

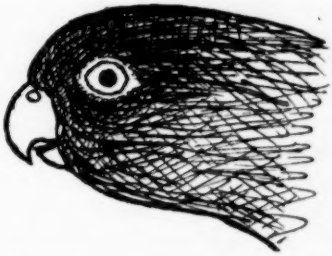

FIG. 2.—MODERATE EYE DISEASE.

The lid margin is thickened and a little swollen bare skin is visible. This stage may last a very long time.

FIG. 3.—SEVERE EYE DISEASE.

There is gross swelling of the orbit—displacing the plumage. The eye cannot be fully opened.

To consider my cases in detail :—

(1) Hen Barraband. Advanced disease in one eye ; the other normal. Culture failed to grow. Various antibiotics tried successively —at first as a *spray* applied several times daily. With penicillin the condition became worse. With ½ per cent zinc sulphate no improvement. Suspension of aureomycin produced temporary improvement, but failed to make further progress after three weeks. Chloromycetin, ¼ per cent spray showed no change, and the disease appeared in the other eye.

The bird was then, after three months of experiments, rather worse than when she arrived. The disease had been somewhat checked in the bad eye, but had started in the originally healthy one. I then, almost in despair, tried a new and improved preparation of chloromycetin which had just come on to the market. This was far too expensive to apply as a spray and I was forced to catch the bird daily and put the preparation directly into the eyes with a dropper. This proved to be the secret. With the much more effective concentration of the drug obtained, and the mechanical washing out of the pus by repeating the dropping every minute for five minutes, once daily, a rapid improvement occurred and the bird was well in a fortnight.

I had at first been obsessed with the idea that I must avoid daily catching, for fear that the bird's general health would not stand so much handling. When I eventually had to do it, I found this fear quite groundless, providing one used a very small cage into which one could put one's hand and take the bird without fuss and with no room for the bird to hurt itself trying to evade capture.

Cases (2) (3) (4) treated together. Another hen Barraband and two Crimson-wings. All had moderately severe disease of both eyes. From the Barraband and one of the Crimson-wings a germ was successfully cultured and reported as " Staphlococcus aureus ", resistant to sulphonamides and penicillin, sensitive to chloromycetin, and very sensitive to aureomycin. From this report aureomycin was obviously the treatment of choice, and was applied by dropping the eyes once daily with a suspension of aureomycin powder in distilled water, 40 milligrammes in 5 c.c. All responded well. The Crimson-wings were cured in three weeks. The Barraband, however, twice developed a severe enteritis (she had loose droppings on arrival), and her treatment had to be suspended whilst she was given heat, and sulphamezathine in her drinking water for the enteritis. She is probably cured now, but has not been under observation long enough after cessation of treatment to be sure.

Cases (5) (6) Bourkes Parrakeets. Both had been treated before arrival with sulphonilimide, without improvement. Cultures failed to grow.

(5) had slight thickening of the eyelids and hardly any discharge. It was cured after two weeks daily dropping with aureomycin.

(6) had mild disease in one eye, and fairly severe disease in the other. It improved very very slowly, and after three weeks had made so little progress that (in the absence of any bacteriological report to help) it was thought penicillin might be worth a trial, and in three days penicillin drops produced definite improvement. The bird then unfortunately became severely ill and had to spend two weeks in the hospital cage, with suspension of treatment, and both eyes relapsed. It is now under treatment again and improving slowly, but had a great deal of lost ground to make up. The large parrakeets were held in the hand and a drop put in each eye, each minute for five minutes. The Bourkes proved too frail to endure this and I was obliged to be content with one drop in each eye and immediate return to the cage. This, I think, was the reason for the relative failure of aureomycin in case (6).

In all cases cure was only assumed if the bird had been observed for at least two weeks without treatment and showed no sign of recurrence of thickening of the eyelids in that time.

Although most of my cases were infected with penicillin-resistant organisms, I think it improbable that this represents the usual state of affairs. Penicillin is highly effective against most strains of staphlococci and against most germs that sulphonamides will kill, although not quite all. Aureomycin is the antibiotic of widest range and is effective against nearly all bacteria likely to cause conjunctivitis. It is, however, in short supply in the United Kingdom ; chloromycetin, available here, is nearly as good. Penicillin, being non-irritant and very freely soluble, would be best for penicillin-sensitive cases—as probably the majority are. Sulphonamides would be effective in a fair number of cases, but not against staphlococci, so that there seems little to be gained by trying them before proceeding to penicillin or the ' mycins '. In conclusion, it seems established, that parrakeet eye disease is a septic conjunctivitis which can be caused by staphlococcus aureus, and probably by a number of other septic organisms as well. Why it should be confined to a few species of Australasian parrakeets, is difficult to explain. It may perhaps be due to inherent lack of resistance in these birds rather than a species—specific infection. It should be curable in most cases by systematic dropping with a suitable antibiotic. I think it would be best to try penicillin first, and if no improvement is noticed in, say, one week, to proceed to aureomycin or chloromycetin—one or the other of these drugs is likely to prove effective.

I am most grateful to those members who have entrusted me with their sick birds for this investigation and hope that the results may be of some help in the future management of this disease. Of course more cases need to be investigated before final conclusions can be drawn.

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BREEDING ACCOUNT OF THE RED-SIDED ECLECTUS PARROT

(Lorius roratus pectoralis)

By H. J. INDGE (Thorpe, Surrey, England)

A batch of twelve Eclectus Parrots arrived on the 13th April, 1952 ; ten Red-sided and two Grand. The latter were taken by one of our lady members, and within a few days I transferred all the Red-sided to various outdoor enclosures. I took them out each morning and brought them back to the bird-room each evening. It may be interesting to know that I took each on my finger for these trips. One day, one of the cocks took wing, and although he made no elevation, he flew quite a hundred feet, with beautiful outstretched wings. I believe he was the only full-winged bird among them, so I transferred him, together with the most promising-looking hen, to an aviary to themselves and left them out altogether. This must have been very early in May, and although we had several frosts that month, the birds were not any the worse for it, even though they had no artificial heat.

By the middle of June the hen had taken to the nest-box, coming out occasionally, and by the end of June she stayed in the whole time, coming out only for a few minutes a day. How many visits were made to the box, to look through the inspection hole, I don't know ; each time the hen came off, I should say, until we nearly tired of looking and believed the hen was just pretending. However, just once more—that was the 29th July—lo ! and behold! an egg ! The next day another !

Immediately the hen sat tight, coming off only for the bare necessities about twice a day, when she moved no further than a foot from the entrance. Each time we had the chance to inspect, we did, and know for a positive fact that one egg hatched on the 24th August and the second the next day. We had a chance to watch the chicks for a few days, and then one disappeared ; probably died and was flattened out. The inspection hole was such that we could see into the nest through a tiny aperture, but could not, nor would not, interfere further.

They were born devoid of down, just like budgerigars, and at thirteen days we noticed a light grey fluff, darkening to the darkest grey and appearing to have the texture of the coat of a woolly monkey. At five weeks a feather, like an emerald, could be seen on the back, and from then on he feathered quickly ; well, as far as quickly goes with Eclectus Parrots.

On the 20th November, he left the nest, after having spent three or four days in contemplation. I wanted to go to the National Show and as a severe frost seemed likely, I took him and his parents, and

placed them in a flight in the birdroom. A risk, I know, but all went well, and a fortnight later, he was picking up food for himself.

The aviary in which the parents lived was 12 feet by 6 feet by 7 feet high. The cock spent most of his day in the shelter, indulging in a couple of flights around the aviary daily, but always ready to answer the hen's call for food. This was a strange, high-pitched affair, which could be heard 500 yards away, and she started calling right from the time she first went into the box, until I took them into the birdroom—some 5 months.

During the whole of that time, the cock was seen to go into the box only twice, once for about two minutes, and the other time for as many seconds. The hen always came to the entrance hole to be fed. She seemed to have the parental love of a mammal rather than of a bird, but then, there is something so very different about an Eclectus.

She never flew, as her flights were clipped, and even now that the new feathers have grown, she has never taken wing. About a fortnight ago I decided to separate them, but the family seemed so dejected, that they were united again.

During the time the youngster was being fed, I gave a quantity of green food, but I never particularized, just picked whatever came to my hand in the garden, in the way of weeds, and also marigold and forget-me-nots, both leaves and flowers. I was reluctant to give fruit, although just occasionally I gave a grape or piece of apple. The seed mixture consisted of sunflower and canary.

The youngster was slightly darker than his father, with a horn-coloured bill. Now, except for the tip of the bill still having a smudge, there is no difference.

* * *

LONDON ZOO NOTES

By JOHN YEALLAND

On reading in a Nigerian newspaper that one of the orange-bellied sub-species of the Senegal Parrot had been presented by Mr. Prestwich, Sgt. F. W. White of the Military Hospital, Kaduna, wrote offering the gift of three more which also proved to be *P. s. versteri.*

These birds came from quite near the range of the doubtfully distinct *P. s. mesotypus,* called by Sclater in *Systema Avium Æthiopicarum* the Kano Yellow-vented Parrot.

A male Hawaiian Duck (*Anas platyrhynchos wyvilliana*), new to the collection, has been presented by the Severn Wildfowl Trust ; a Cape Teal (*Anas capensis*) by Mr. Terry Jones, and a pretty Tree Sparrow, the Cinnamon (*Passer rutilans cinnamomeus*) by Mr. Trevor Crewes. A Leadbeater's Cockatoo (*Kakatoe leadbeateri*) ; a Southern Puffin

(*Fratercula arctica grabae*), and two Northern Guillemots (*Uria aalge*) have also been presented.

An interesting parrot probably not seen in this country for many years, and called variously the Red-throated, White-fronted, or Jamaican (*Amazona collaria*), and a Red and Yellow Macaw (*Ara chloroptera*) have been deposited ; an Illiger's Macaw (*Ara maracana*) received in exchange and a Bengal Pitta (*Pitta brachyura*) purchased.

Three Sun-birds new to the collection have been received from Messrs. Seago and Bloom ; they are the Kenya Violet-backed (*Anthreptes longuemarei orientalis*) ; the Abyssinian Mariqua (*Cinnyris mariquensis osiris*), and the Somali Scarlet-chested (*Chalcomitra hunteri*).

A single egg of the Ceylon Fish Owls which have nested unsuccessfully during several previous winters again proved infertile, as have six Emu eggs, the seventh containing a chick which died at an early stage of development.

Two Black-footed Penguins have so far been reared, and the Great Eagle-Owls and New Zealand Sheld-Duck are now nesting.

* * *

BRITISH AVICULTURISTS' CLUB

The thirty-seventh meeting of the Club was held at the Rembrandt Hotel, Thurloe Place, South Kensington, S.W. 7, on Wednesday, 11th March, 1953, following a dinner at 7 p.m.

Chairman : Miss P. Barclay-Smith.

Members of the Club : Mrs. J. R. Alderson, H.G. the Duke of Bedford, B. Benedict, Miss K. Bonner, Mrs. V. M. Bourne, Captain A. Clarence, G. T. Clark, Mrs. G. T. Clark, Mrs. F. D. Cooper, T. Crewes, P. L. Dabner, Sir Godfrey Davis, W. T. Dring, Mrs. W. T. Dring, B. H. Dulanty, O. E. Dunmore, A. Ezra (Patron), J. F. M. Floyd, J. C. Garratt, W. O. Gilbert, Mrs. W. O. Gilbert, T. Goodwin, F. Grant, H. J. Harman, Dr. E. Hindle, Major E. F. Housden, G. T. Iles, F. E. B. Johnson, F. T. Jones, Miss M. H. Knobel-Harman, J. W. Lester, D. R. Lovell, C. J. Morny, G. S. Mottershead, H. Murray, S. Murray, K. A. Norris, S. Porter, A. A. Prestwich, D. M. Reid-Henry, R. C. J. Sawyer, J. L. Sears, D. Seth-Smith, K. J. Smith, E. O. Squire, P. Sutton, J. A. Swan, R. A. Taylor, E. H. Tong, E. N. T. Vane, C. H. Wastell, Professor J. Wheatley, Mrs. J. Wheatley, H. Wilmot, J. J. Yealland.

Guests of the Club : Field-Marshal the Viscount Alanbrooke, Professor J. Berlioz.

Guests : Mrs. M. E. Armitage, D. S. Armitage, Miss A. J. Avery, Dr. K. W. Aylwin-Gibson, J. Bailey, P. Bates, Mrs. B. Benedict, Dr. C. P. Blacker, P. B. Bloomer, Miss J. Crone, J. Culihan, W. Cummings,

Lady Davis, Miss I. Dix, Miss K. Dring, T. W. Dring, L. Ellis, Commander R. Eyre, Mrs. R. Eyre, Mrs. J. C. Garratt, Miss H. Gentry, Mrs. F. Grant, Mrs. E. F. Housden, Miss M. Kirkby-Mason, F. W. Luck, H. M. Luther, P. Marshall, Mrs. N. Masters, Mrs. R. Maurice, Mrs. C. J. Morny, Mrs. S. Murray, R. N. Sanders, Mrs. R. N. Sanders, Mrs. D. Seth-Smith, Mrs. R. Sharpe, Mrs. P. Sutton, Mrs. J. A. Swan, Mrs. R. A. Taylor, Mrs. E. H. Tong, Miss M. White, Mrs. H. Wilmot, A. J. Woods, Mrs. I. Wren.

Members of the Club, 56 ; guests, 45 ; total, 101.

The Chairman, opening the meeting, said she had very great pleasure in welcoming Professor Berlioz, of the Paris Natural History Museum, who was the world's foremost authority on Humming Birds. Professor Berlioz, in response, said he was delighted to have the opportunity of attending a Club meeting.

On introducing Viscount Alanbrooke, the Chairman said the Club greatly appreciated that amidst his many official duties he had found time to pay a second visit. The appreciation was the more obvious by virtue of the fact that the attendance was easily a record.

Viscount Alanbrooke showed his two new colour films, " Waders " and " The Flamingoes of the Camargue ". The former, taken on Hilbre Island, Dee Estuary, showed a large variety of wading birds. The sequence of a Curlew preening with salt water was of special interest. Viscount Alanbrooke gave an amusing account of the difficulty experienced in locating the Flamingoes. Due to disturbance, possibly by low flying aircraft, they had moved to new breeding grounds. The Camargue is apparently threatened by various reclamation schemes, but French ornithologists will, of course, make every possible effort to preserve this exceptionally interesting area.

There were some good slow-motion pictures of Flamingoes in flight ; and in the close-ups it was interesting to note the striking variation in the size of nesting birds. There were also some good shots of the Bee-eater.

The excellence of the films was only matched by the commentary, and at the end the large audience showed by its sustained applause that it had indeed appreciated Viscount Alanbrooke's efforts.

The next meeting of the Club is on **13th May, 1953.**

ARTHUR A. PRESTWICH,
Hon. Secretary.

* * *

NEWS AND VIEWS

The Ministry of Agriculture and Fisheries (Animal Health Division) has decided to reimpose the ban on the importation of Parrots. The Order, " Parrots and Miscellaneous Birds (Prohibition of Importation) Order, 1953," came into force on 16th February, 1953. Copies of the Order, price 2*d.*, may be obtained from H.M. Stationery Office, York House, Kingsway, W.C. 2.

Until further notice " No person shall import into Great Britain from any other country or part of a country any bird to which this Order applies ", namely, " live birds of any of the following descriptions, that is to say—birds of the species Psittaciformes, including any of the birds commonly called parrots, parrakeets, budgerigars, lovebirds, macaws, cockatoos, cockatiels, conures, lories, and lorikeets."

In addition to preventing the spread of ornithosis (sometimes called psittacosis), the regulations are aimed at safeguarding the country's poultry flocks against the introduction of fowl pest from abroad.

* * *

Peter Scott, accompanied by his wife, has flown to South America. They are bound for Tierra del Fuego, where, during the next two months, they will study the breeding habits of certain South American waterfowl—especially the Bronze-winged and Torrent Ducks.

* * *

W. H. Turner writes : " Sir Edward Hallstrom now has eight hybrids from Hooded cocks and Many-coloured hens : the result being so much like the Paradise Parrot it is hard to tell the difference between these and a mounted skin of the Paradise. At present they are only young, but by appearance there seems to be male and female in them. It is, of course, not yet possible to tell whether they will be fertile and it will be interesting to follow on with the breeding."

A. A. P.

* * *

REVIEW

LOVEBIRDS AND PARROTLETS. By L. P. Luke. *Cage Birds*, London, 1952. Price 8*s.* 6*d.* net.

The host of birdkeepers to whom Lovebirds and Parrotlets have recently become available for the first time will find much to interest and instruct them in the proper care and management of these delightful subjects in captivity in Mr. Luke's new book.

It is somewhat confusing, however, when the author points out the well nigh impossibility of sexing certain species and then paradoxically proceeds to enumerate eight features to enable one to determine the

sexes, some of which have proved quite unreliable. Similarly, he quite correctly states that the Peachfaced has no eye-ring, yet the colour plate shows a distinct white area round the eye. On this plate the Redfaced appears to be an undersized Peachface and the eye-rings of the Blackcheek and Masked are comparatively too small.

Several historical facts are not correct. The Blue Masked first appeared in this country some four or five years prior to its arrival in the United States. The Lutino Nyasa has never been bred in this country. The Blackcheek, far from being the most commonly met with to-day, is along with the Madagascar and Nyasa, practically unobtainable owing to export restrictions in its country of origin, no importer secured a consignment during the raising of the ban.

Such inaccuracies must lead to confusion among beginners and irritation to more knowledgeable readers; a great pity in view of the invaluable worth of the chapters on management, aviary construction, and behaviour in captivity.

E. N. T. V.

* * *

NOTES

BARBARY DOVES

Mr. Derek Goodwin's interesting article on the Barbary Dove brought to mind my early and pleasant experiences with this species.

In California they are very frequently sold under the name of Ring-neck Dove. As they are very cheap to buy they are often the species the novice first undertakes. They were among the first birds I purchased as a very young boy—and I can well remember my first pair costing the sum of a dollar—a rather sizeable sum for an eleven-year-old.

My one pair bred well and in a short period of time I had many more Barbary Doves than I could possibly use. Because most pet stores were already filled to overflowing with them (what price must dealers have paid for them to sell a pair for a dollar?) it was virtually impossible to get rid of one's surplus.

We used to let a few out in the garden—and they stayed very well. Unfortunately for the Barbary Dove the cats would invariably reduce their numbers. The Barbary Doves aided and abetted the cats in their destruction by conveniently sitting on garage and aviary roofs—"sitting ducks" for their enemy.

One fall, when we had about eight youngsters to dispose of, we caught them up and released them on a ranch some six miles away. This ranch was in a locality where California Quail and the California Mourning Dove abounded, and so it was felt that the Barbary Doves would have a good chance to succeed. Their homing instinct was nil for none of the eight returned to their home aviaries. Whether any of the released birds lived and/or bred I am unable to say.

Occasionally one sees a Barbary or two in with groups of other pigeons or doves. At the San Juan Capistrano Mission (some seventy miles from Los Angeles) the Barbary Dove apparently breeds right at the Mission. The Mission gardens abound with pigeons and also a few Barbary Doves—all very tame as they are constantly fed by visitors. In downtown Los Angeles' Pershing Square I have seen Barbary Doves associating with common pigeons—and apparently thriving.

I might add that we formerly raised many hybrids between a male Barbary and a female California Mourning Dove. The Mourning Dove we inherited from a friend who had found it with a damaged wing. The wing healed, and the bird (which had been kept in an outside aviary) refused to leave when it was released.

Instead it brought back a mate and we trapped the pair and subsequently reared many young. The youngsters were usually released and they would generally stay for a few days and then wander away. When the male Mourning Dove died we replaced him with a male Barbary Dove, and this arrangement certainly suited the hen for they instantly began family operations.

It might be of interest to note that this female California Mourning Dove was a known eleven years old when she finally died. She bred right up to her death, though in her last years sometimes only a single chick would be raised.

The Chinese Necklace Dove is firmly established around the Los Angeles area. I see it very frequently—and it certainly appears to be as common as the local California Mourning Dove, at least in our locality. It not infrequently associates with the Mourning Dove, small mixed groups of four, five, or six being seen feeding in vacant lots, etc. The Chinese Dove appears rather intelligent for pairs around frequently fly into our garage for spilled grains—a feat the local Mourning Dove has never accomplished.

The Chinese Necklace Dove is a very desirable addition and doubtless a good sporting bird. There is a pair which nests in a pear tree in our yard—and they usually nest several times a year.

From memory I believe a rather detailed history of this bird in California has recently appeared in the *Condor*, Journal of the Cooper Ornithological Club.

DAVID M. WEST.

* * *

CORRESPONDENCE

THE PROBLEM OF THIRD BROODS OF PARRAKEETS

In regard to Mr. Boosey's letter about Turquoisines, I certainly should not attempt to haul a nest-box out of the aviary when the young are at their wildest stage.

There are however, methods of avoiding undue damage to the young and at the same time of preventing the hen from rearing a third brood.

With the rarer and more timid Grass Parrakeets I am coming back to my original view that the roof of the aviary should have an inner lining of string netting and, in addition, before the young of even the first brood have left the nest, a good thick screen of branches should be tacked on to the wire-netting over the whole end of the flight to prevent them crashing against that.

Coming now to the problem of the third brood, when the second brood are still in the nest and the hen has not yet started to lay her third clutch, you can remove the cock and also, if you like, the second nest-box. In order to encourage the hen to make a good job of finishing feeding the second brood single-handed, she should be given more hemp than it is usually safe to give Turquoisines and also an abundant supply of the choicest seeding grass. The cock should be placed in a cage in the bird-room and fed on very plain seed and green food, a combination of circumstances which will encourage him to go out of breeding condition and start moulting. He should not be put in another aviary as he will be more restless there and call continually to the hen and he may also, very likely, pick up some deadly microbe, as late summer is the time when these pests are most virulent. When the right time is thought to have arrived to take the young birds away from their mother (they have got to be moved *some* time), you can also remove the nest-box and put the cock back with his mate and she, too, will not be long in dropping into moult while the weather is still good.

An alternative plan is to leave both parents in the aviary and, when the last young one of the second brood has left the nest a few days, go in and net the whole brood as quickly as you can before they have time to do themselves serious damage. Put them in a cage in the bird-room and cover the whole floor of the cage with seed and seeding grass and keep the bird-room at a comfortably warm temperature. There is little doubt, if they are healthy and well-reared, that they will start feeding adequately as soon as they begin to get hungry but, if you like, you can put with them a young Budgerigar which has started to feed itself freely, in order to give them a lead. When

they are feeding freely and have steadied down a bit they can be put back in an aviary, being first confined to the shelter for a day or two so that they grow accustomed to it and know where to find the food. It is, of course, necessary that their new aviary should have the same arrangements with regard to protection of the roof and end of the flight. There they can remain happily until they moult into adult plumage and begin to quarrel ; or (as is much more likely, as Mr. Boosey is as well aware as I), until they die of pneumonia or nephritis ; get clawed by a sparrowhawk ; or fall a victim to X's latest practical joke ! When the young are out of the parents' aviary, you can, of course, remove the nest, and the third clutch of eggs which Lovebirds may take if you have any.

Mr. Boosey mentions a hen he has had for several years which has reared three broods each season, but can he tell us how many hens he has lost before they have put up this satisfactory record and how many young of the third broods have matured into good breeding stock ?

There are, no doubt, hundreds of hen Budgerigars which have reared three or more broods in a season and survived for a reasonable period, but that does not alter the fact that it is the almost universal practice of breeders who want to produce stock of the highest quality to limit the number of nests to two.

BEDFORD.

CROWHOLT, WOBURN,
BLETCHLEY, BUCKS.

FOOD OF PARRAKEETS

I was very interested in what Mr. E. J. Boosey had to say about sweetened rice and milk as a food for his Plum-headed Parrakeet as this corresponds with my own experience in India.

When I was at Karwar, a very lovely place on the west coast of India, I had some young Malabar Parrakeets brought to me which had been fed on the usual diet of parched gram flour, moistened with water. They seemed too far gone to help, but I remembered an article by Dr. Amsler in which he described how he had fed his breeding Swainson's Lorikeets on boiled rice and milk and honey sugar. I, therefore, got Fernandes, our cook, who was very interested in birds, to make me some rice mould sweetened with brown sugar. I do not think the fact that the sugar was brown made any difference. Two of the little things were too far gone to save, but the two stronger ones ate this new food avidly and grew into fine birds. I used this food also for some tiny Hanging Lorikeets and they throve upon it.

I have often thought the diet of hard grain inadequate for Parrakeets. The Malabar Parrakeet, so far as my experience goes, is a forest lover, and I should think that its diet consists far more of soft wild fruits than hard grain. Incidentally, I think I am the person to whom Mr. Boosey refers in one of his articles, who told him about the breeding of the Grey Parrot in India. It only shows what an unbelieving fellow Mr. Boosey is and what a bad judge of character he was, in this particular case.

BERESFORDS, GODFREY DAVIS.
BOUGHTON MONCHELSEA,
Nr. MAIDSTONE, KENT.

THE COLLARED TURTLE DOVE

MADAM,—May I return to the subject of the letter from Mr. I. J. Ferguson Lees (*antea*, 1952, *58*, 194), the Collared Turtle Dove, *Streptopelia decaocto* ?

These are once more being offered for sale in this country.

Meanwhile the spread of the wild species through Europe continues ; it has now bred in Sweden and has reached the Ardennes in Northern France. If any reach Britain it is of the greatest importance that they should be protected from confusion with escaped or released imported birds.

In Germany quite a number of wild Collared Turtle Doves have already been ringed, and two have been recovered (both show that first-year birds can travel long distances) ; so may I suggest that all those who purchase Collared Turtle Doves, whether they intend to keep them at liberty or not, should mark their birds with *coloured*, not aluminium, rings.

JAMES FISHER.

OLD RECTORY, ASHTON, NORTHAMPTON.

THE AVICULTURAL SOCIETY RECEIPTS AND PAYMENTS ACCOUNT

Year ended 31st December, 1952.

RECEIPTS

	£ s. d.	£ s. d.
To Balance at Bank, 1st January, 1952		751 18 4
„ Ordinary subscriptions		
Arrears	16 19 1	
Current	674 19 7	
In advance	76 5 2	
		768 3 10
„ Life membership subscriptions		30 0 0
„ Avicultural Society of America		
Balance, 1951	27 11 8	
Miscellaneous	1 7 0	
		28 18 8
„ Donations		30 8 1
„ Sales of Magazines		69 6 0
„ Sales of *Aviculture*		101 0 0
„ Sales of *Australian Parrots in Captivity*		50 12 4
„ Sales of surplus books		375 2 0
„ Sales of plates		40 16 0
„ Sales of waterfowl rings		7 3 1
„ Sales, Miscellaneous		6 7 8
„ Advertisements		4 2 2
„ Dividends		8 0 6
		£2,271 18 8

PAYMENTS

	£ s. d.	£ s. d.
By Printing of Magazine		820 5 4
„ Coloured plates		10 0 0
„ Sundry printing and stationery		49 4 2
„ Printer's charges and expenses		24 10 9
„ Honorarium to Editor		100 0 0
„ Secretarial		52 0 0
„ Preparation of Index		10 10 0
„ Translation fees		10 10 0
„ Newman Library		
Insurance	2 5 0	
Purchases	2 13 5	
		4 18 5
„ Hopkinson Library, transport		5 0 0
„ Medals		8 14 0
„ Waterfowl rings		3 12 0
„ Advertisements		25 0 0
„ Expenses at Council Meetings		3 14 0
„ Bank charges		16 1
„ Postages		27 19 6
„ Miscellaneous expenditure		10 13 7
		1,167 7 10
„ Balance at Bank, 31st December, 1952		1,104 10 10
		£2,271 18 8

I have examined the above Account with the books and vouchers of the Society and certify it to be in accordance therewith. I have verified the Bank Balance.

LONDON.
19th February, 1953.

J. WATKIN RICHARDS, *Certified Accountant.* } *Hon. Auditor.*

CANDIDATES FOR ELECTION

F. Bailey, 54 Lynwood Grove, Audenshaw, Manchester. Proposed by Miss K. Bonner.

A. J. Clarke, F.R.I.C.S., Foxhole Cottage, Llanbedrog, Nr. Pwllheli, S. Caernarvonshire. Proposed by F. E. Thomas.

M. S. Coomber, Valenciennes, Burwash, Sussex. Proposed by H. A. Fooks.

Mrs. F. D. Cooper, Dunstan Lodge, Churchdown, Gloucester. Proposed by Miss K. Bonner.

J. Corlett, Rt. 6—Box 647, Mobile, Alabama, U.S.A. Proposed by A. A. Prestwich.

K. Dvorak, 305 N. Kilbourn Avenue, Chicago 24, Ill., U.S.A. Proposed by D. M. West.

S. Efros, 4907 Rodeo Road, Apt. 1, Los Angeles, Calif., U.S.A. Proposed by A. A. Prestwich.

R. H. Gopsill, 152 Wyggeston Street, Burton-on-Trent. Proposed by Miss K. Bonner.

Mrs. D. A. Hobson, Warren Cottage, Totland Bay, Isle of Wight. Proposed by Miss K. Bonner.

D. A. Holter, 221—31st Street, Manhattan Beach, Calif., U.S.A. Proposed by W. B. Frostick.

C. M. Jasawalla, "Hill Crest," 14 Salisbury Park, Poona, India. Proposed by Abde Tyebjee.

Mrs. M. Kersley, Ketleys, Rosemary Lane, Flimwell, Nr. Hawkhurst, Sussex. Proposed by H. A. Fooks.

D. J. Macphie, Hazel Cottage, Petersham, Surrey. Proposed by Miss K. Bonner.

T. Maughan, 77 Calton Avenue, Dulwich, S.E. 21. Proposed by A. A. Prestwich.

L. G. Middleton, Stack House, Old Green Lane, Garstang, Lancs. Proposed by Miss K. Bonner.

J. P. McHale, 1526 W. Highland Avenue, Chicago 26, Ill., U.S.A. Proposed by A. A. Prestwich.

E. T. Palmer, 4595 Picton Street, Vancouver 16, B.C., Canada. Proposed by Miss E. Lemon.

E. Richards, 5 West Lane, Pengelly, Delabole, N. Cornwall. Proposed by A. A. Prestwich.

J. F. Simões, 5 Largo Cone Barão, Lisboa, Portugal. Proposed by A. A. Prestwich.

T. Stewart, 33 Jeffrey Avenue, Parkfields, Wolverhampton, Staffs. Proposed by Miss K. Bonner.

M. B. Stone, Jr., Martin's Pond Road, Groton, Mass., U.S.A. Proposed by Dr. S. Dillon Ripley.

W. Whiston, "Lothersdale," Far Heath, Winterley, Sandbach, Cheshire. Proposed by Miss K. Bonner.

Mrs. E. Wicks, Silver Springs, Beaufort Road, St. Leonards-on-Sea, Sussex. Proposed by H. A. Fooks.

J. B. Zabaldano, 15702 E. Nelson Avenue, Puente, Calif., U.S.A. Proposed by Paul E. Schneider.

NEW MEMBERS

The thirty-nine Candidates for Election, proposed in the January–February, 1953, number of the Avicultural Magazine, were duly elected members of the Society.

READMITTED

I. Tager, P.O. Box 40, Parys, O.F.S., South Africa.

CHANGES OF ADDRESS

R. A. Taylor, to 182 Lambeth Walk, London, S.E. 11.

T. F. M. Williamson, to Benvenuto Avenue, Brentwood Bay, B.C., Canada.

DONATIONS

	£	s.	d.
A. Lamb	2	2	0
G. Beever	1	0	0
Captain C. Scott-Hopkins .	1	0	0

MEMBERS' ADVERTISEMENTS

The charge for Members' advertisements is ONE PENNY PER WORD. *Payment must accompany the advertisement, which must be sent on or before the 15th of the month to* A. A. PRESTWICH, 61 CHASE ROAD, OAKWOOD, N. 14. *All members of the Society are entitled to use this column, but the Council reserves the right to refuse any advertisements they consider unsuitable.*

FOR SALE

AVICULTURAL MAGAZINE.—1928–1949, bound; 1950–1952, in parts. In perfect condition.—Offers to Miss M. H. KNOBEL-HARMAN, 19 Connaught Square, London, W. 2.

1952 Swinhoe Pheasants, £12 10*s.* pair; pure Golden, Amherst, and Swinhoe eggs for sale in season.—D. A. MARSHALL, 21 Wilson Avenue, Troon, Ayrshire.

First-cross Silkie Bantams, ideal foster-mothers, pullets and setting eggs.—Major W. H. PAYN, Hartest Place, Bury St. Edmunds.

WANTED

Hen Stanley Parrakeet.—Particulars to V. GULLIVER, Vale Road, Aylesbury.

Bahama Pintail drake, Gadwall duck.—Major W. H. PAYN, Hartest Place, Bury St. Edmunds.

AUSTRALIAN PARROTS IN CAPTIVITY

A series of articles by Alan Lendon published in the Avicultural Magazine. A full account of 60 species of Australian Parrots is included in the book which deals where possible with the author's personal experiences in keeping them in captivity in South Australia.

There are one coloured and seven photographic plates. Stiff paper cover. Price 7s. 10d., post free. Published by the Avicultural Society, and obtainable from the Hon. Secretary, 61 Chase Road, Oakwood, London, N. 14.

STEPHEN AUSTIN AND SONS, LTD., PRINTERS, HERTFORD.